



Department of Commerce

Safety & Buildings Division

201 East Washington Avenue

P.O. Box 7969

Madison, WI 53707

Approval #

970040-U

Wisconsin Material Approval

Material

Flexible Connectors - Flammable Liquid
Petroleum Products

Manufacturer

FLEX-ING, Inc.
2828 Fallon Drive
Sherman, Texas 75090

SCOPE OF EVALUATION

Fireman and FLEX-FLO flexible connectors for use with flammable liquids, manufactured by FLEX-ING, Inc., have been evaluated for conformance, in accordance with **ss. ILHR 10.51 (1) (b) 2.** through **4., 10.51 (2) (e)** and **s. ILHR 10.55 (1), (2) (a) and (b)** of the current edition of the Wisconsin Administrative Flammable and Combustible Liquids Code, **Chapter ILHR 10.**

DESCRIPTION AND USE OF MATERIAL

Fireman and FLEX-FLO all metallic flexible connectors intended for use in rigid underground piping systems for flammable liquids to serve as a flexible junction to compensate for expansion, contraction, settling of the storage tank, and vibration stresses from power operated pumps. They have a length limitation of 8 feet.

These metallic flexible connectors are for use underground and underground sump applications such as a direct connection to submersible pumping units in manways or emergency shut-off valves at the base of dispensing devices. The connectors do not have to be buried within sumps. It is also permissible to use these connectors with aboveground storage tanks.

The hose assembly consists of a corrugated stainless steel tube longitudinally butt welded to the fittings. The corrugated hose is covered with a stainless steel braid. The components are assembled into the flexible connector and TIG welded.

TESTS AND RESULTS

Fireman and FLEX-FLO flexible connectors have been tested and listed by Underwriters Laboratories, Inc., File No. MH25059.

LIMITATIONS OF APPROVAL

The Fireman and FLEX-FLO flexible connectors are approved for use as part of an underground storage tank system in compliance with the construction standards of **s. ILHR 10.51 (2) (e)**.

Metallic connectors in contact with soil shall be provided with a corrosion protection system in accordance with **s. ILHR 10.51 (2)**, installed and maintained in accordance with the requirements of **s. ILHR 10.55**.

Each connector shall be tested after assembly for external leakage, hydrostatically tested to 150 percent of the maximum anticipated pressure of the system, or pneumatically tested to 110 percent of the maximum anticipated pressure of the system.

Listee's name and model designation stamped or etched on end fitting or a metal band secured around hose between end fittings.

Fireman and FLEX-FLO flexible connectors shall be installed in accordance with the manufacturer's installation recommendations and shall be electrically isolated from all other buried metal components including pumps, piping, electrical conduit and tank components.

Corrosion protection meeting the requirements of **ss. ILHR 10.51 (1) (b) 2. through 4., ILHR 10.51 (2), and ILHR 10.55 (1) and (2) (a) and (b)**, have not been evaluated in the approval. When required, data on corrosion protection shall be provided when plans are submitted.

This approval will be valid through December 31, 2002, unless manufacturing modifications are made to the product or a re-examination is deemed necessary by the department. The Wisconsin Material Approval Number must be provided when plans that include this product are submitted for review.

DISCLAIMER

The department is in no way endorsing or advertising this product. This approval addresses only the specified applications for the product and does not waive any code requirement not specified in this document.

Reviewed by: _____

Approval Date: _____ By: _____

Lee Finley, C.S.I.
Architectural Code Consultant
Program Development Bureau

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